

CLAIMS

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Currently Amended) A method for attaching an agent to a body tissue comprising:
applying to the body tissue as a conjugate an agent attached to a linker selected from the group consisting of compounds that are substrates of lysine oxidase and compounds that react with lysine oxidase products,
applying to the body tissue lysine oxidase in an amount effective to permit crosslinking the agent attached to the linker to the body tissue via the linker, and
allowing said crosslinking to occur.
2. (Original) The method of claim 1, wherein the lysine oxidase is applied to the body tissue first.
3. (Original) The method of claim 1, wherein the linker comprises a molecule selected from the group consisting of:
 - (a) at least one amine, aldehyde or lysine,
 - (b) at least two contiguous linked amines, aldehydes or lysines,
 - (c) at least three contiguous linked amines, aldehydes or lysines,
 - (d) at least four contiguous linked amines, aldehydes or lysines, and
 - (e) at least five contiguous linked amines, aldehydes or lysines.
4. (Original) The method of claim 1, wherein the linker is 4 or more contiguous amines, aldehydes or lysines attached directly to one another by peptide bonds.
5. (Original) The method of claim 1, wherein the linker comprises a polymer of amino acids and wherein at least 20% of the amino acids are lysines.
6. (Original) The method of claim 5, wherein at least 30% of the amino acids are lysines.

7. (Original) The method of claim 5, wherein at least 40% of the amino acids are lysines.
8. (Original) The method of claim 1, further comprising first attaching to the body tissue a complementary linker, and attaching the complementary linker and the agent to one another by crosslinking the linker and the complementary linker by the lysine oxidase.
9. (Original) The method of claim 8, wherein the complementary linker is attached to the body tissue by applying to the body tissue the complementary linker,
applying to the body tissue an amount of lysine oxidase effective for crosslinking the complementary linker to the body tissue, and
allowing said crosslinking to occur.

10. (Original) The method of claim 9, wherein a polymer rich in lysine is one of the linker or complementary linker.

11-23. (Cancelled)

24. (Currently Amended) A method for attaching an nonprotein agent to a body tissue, comprising:

first attaching to the body[[-]]tissue a linker which is covalently bondable to ~~the-a~~
nonprotein agent in the presence of lysine oxidase,
then applying to the body tissue having the linker attached thereto ~~an~~ nonprotein agent that is a substrate of lysine oxidase and which is covalently bonded to the linker in the presence of lysine oxidase,
applying to the body tissue lysine oxidase in an amount effective to crosslink the nonprotein agent to the linker, and
allowing said crosslinking to occur.

25-35. (Cancelled)

36. (Currently Amended) A method for attaching an agent to a body tissue, comprising:
selecting an agent that is a substrate for lysine oxidase,
applying the agent in an isolated form to the body tissue in the presence of a sufficient amount of lysine oxidase to crosslink the isolated agent to the body tissue, and
allowing the crosslinking to occur,
wherein the agent is a conjugate of an active agent attached to a linker not native to the active agent.

37-50. (Cancelled)

51. (Original) A method of treating a subject to attach microparticles to a skin surface of the subject comprising
contacting the skin surface with lysine oxidase in an amount effective to permit crosslinking of the microparticles to the skin surface
contacting the skin surface with microparticles having surface available reactive groups in an amount sufficient to attach the microparticles to the skin surface in the presence of lysine oxidase,
allowing the microparticles to remain in contact with the skin surface for a time sufficient to permit a layer of microparticles to covalently attach to the skin surface.

52-94. (Cancelled)

95. (Previously Presented) The method of claim 9, wherein the polymer rich in lysine has 4 or more contiguous lysines directly attached to one another by peptide bonds.

96. (Previously Presented) The method of claim 1, wherein the agent is not itself a substrate of lysine oxidase.

97. (Previously Presented) The method of claim 1, wherein the agent does not itself react with lysine oxidase substrates.

98. (Previously Presented) The method of claim 1, wherein the body tissue is selected from the group consisting of skin, hair and nails, and wherein the agent is selected from the group consisting of a cosmetic agent, a bulking agent, a hair conditioning agent, a hair fixative, a sunscreen agent, a moisturizing agent, a depilatory agent, an anti-nerve gas agent, a film forming agent, a vitamin, an insect repellant, a coloring agent, a pharmaceutical agent, a ligand-receptor complex and a receptor of a ligand-receptor complex.

99. (Previously Presented) The method of claim 1, wherein the agent is a pharmaceutical agent.

100. (Previously Presented) The method of claim 1, wherein the agent is a nonprotein.

101. (Previously Presented) The method of claim 1, wherein the agent attached to a linker does not comprise a microparticle.

102. (Previously Presented) The method of claim 24, wherein a polymer rich in lysine is the linker.

103. (Previously Presented) The method of claim 102, wherein the agent comprises a polymer rich in lysine.

104. (Previously Presented) The method according to claim 24, wherein the agent is selected from the group consisting of a visible label of a high affinity noncovalent coupling pair, a pharmaceutical agent, a receptor or a ligand of a receptor/ligand pair, a cosmetic, a sunscreen agent, a coloring agent, a bulking agent, a hair conditioning agent, a hair fixative, a moisturizing agent, a depilatory agent, an anti-nerve gas agent, a film forming agent, a vitamin and an insect repellant.

105. (Canceled)

106. (Currently Amended) The method of claim 36, wherein the active agent is a native active agent free of conjugation with groups not native to the agent.

107. (Previously Presented) The method of claim 36, wherein the agent is a nonprotein.

108. (Previously Presented) The method of claim 51, wherein the surface available reactive groups are selected from the group consisting of amines, aldehydes, aliphatic amines or lysines.

109. (Previously Presented) The method of claim 51, wherein the layer of microparticles is non-planar.

110. (Previously Presented) The method of claim 51, wherein the microparticles further comprise an agent, or an active agent, or a non-nucleic acid active agent, or a non-protein active agent.

111. (Previously Presented) The method of claim 110, wherein the active agent is not itself a substrate of lysine oxidase and is not itself able to react with lysine oxidase products.

112. (New) A method for attaching an agent to a body tissue, comprising:
first attaching to the body tissue a linker which is covalently bondable to the agent in the presence of lysine oxidase,
then applying to the body tissue having the linker attached thereto the agent that is a substrate of lysine oxidase and which is covalently bonded to the linker in the presence of lysine oxidase,
applying to the body tissue lysine oxidase in an amount effective to crosslink the agent to the linker, and
allowing said crosslinking to occur,
wherein the linker comprises a polymer rich in lysine.

113. (New) The method according to claim 112, wherein the agent is selected from the group consisting of a visible label of a high affinity noncovalent coupling pair, a pharmaceutical agent, a receptor or a ligand of a receptor/ligand pair, a cosmetic, a sunscreen agent, a coloring agent, a bulking agent, a hair conditioning agent, a hair fixative, a moisturizing agent, a depilatory agent, an anti-nerve gas agent, a film forming agent, a vitamin and an insect repellant.

114. (New) A method for attaching an agent to a body tissue, comprising:
selecting an agent that is a substrate for lysine oxidase,
applying the agent in an isolated form to the body tissue in the presence of a sufficient amount of exogenously applied lysine oxidase to crosslink the isolated agent to the body tissue, and
allowing the crosslinking to occur,
wherein the agent is an active agent attached to a linker that comprises a polymer rich in lysine.

115. (New) The method of claim 114, wherein the active agent is a native active agent.

116. (New) The method of claim 115, wherein the native active agent is free of conjugation with groups not native to the native active agent.

117. (New) The method of claim 114, wherein the linker is not native to the active agent.

118. (New) A method for attaching an agent to a body tissue, consisting of:
selecting an agent that is a substrate for lysine oxidase,
applying the agent in an isolated form to the body tissue in the presence of a sufficient amount of exogenously applied lysine oxidase to crosslink the isolated agent to the body tissue, and
allowing the crosslinking to occur.